MARSHALL STAR

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A message from the Center Director

The new organization

If you could work in an organization that more quickly and effectively responds to your needs and the needs of its customers, you would probably want to be a part of such an organization. The organization we have today at Marshall has been in existence a long time – 25 years in fact.

Yet the NASA we work for and the industry we support have experienced tremendous changes in many respects. No organization is perfect, but some work better than others because they better address the needs of the organization at a given time in history.

The time is right to move to a new, improved organization that better addresses the needs of our internal and external customers in today's environ-

*See **New Organization** on page 5*

During all-hands meeting

Center Director Stephenson announces streamlined Marshall reorganization

■ Reorganization designed to maintain strong cross-cutting engineering capabilities, strengthen product lines

Marshall Center Director Art Stephenson told employees last week that "the time is right to move to a new, improved organization that better addresses the needs of our customers in today's environment."

Stephenson announced the reorganization of the Center at an all-hands meeting for employees Jan. 29 conducted in Morris Auditorium in building 4200 and broadcast on Centerwide television. The reorganization will result in four new directorates and one new office. "The reorganization is designed to maintain a strong cross-cutting engineering capability while strengthening our product lines," Stephenson said. The reorganization will require final approval by officials at NASA Headquarters in Washington, D.C. Stephenson said.

NASA photo by Emmett Given

Center Director Art Stephenson discusses the proposed reorganization at Marshall during an all-hands meeting Jan. 29.

*See **All-hands meeting** on page 2*

President's proposed FY 2000 budget includes $2.277 billion for Marshall

by Mike Wright

NASA Administrator Dan Goldin said Monday that President Clinton's proposed budget to Congress for Fiscal Year (FY) 2000 includes $13.578 billion for NASA.

The budget includes a proposed $2.127 billion for the Marshall Center. In addition, the Center will receive about $150 million to develop an International Space Station Propulsion Module. "Our budget is nearly the same as last year, down about $54 million," said Marshall Center Director Art Stephenson on Monday.

Stephenson attributed that slight decrease to the fact that several Marshall projects have either been completed or moved from the development stage this year to the testing stage which requires less funding. For example, upgrades completed to the Space Shuttle Main Engine will mean about a $30-million reduction in expenditures. Stephenson also noted that development work is essentially completed on the Chandra X-ray Observatory and the Gravity Probe B, requiring about $32 million less in FY 2000. He also said moving from the development program to a test program for the X-33 Technology Demonstrator will require about $114 million less in next fiscal year in Center funding. In addition, the Center expects to save more than $22 million as a result of a new Consolidated Space Operations Contract.

Stephenson pointed out, however, that the Marshall budget includes funding for a new experiment in Earth Sciences called "SPARCLE" that will fly on the Shuttle. The experiment will be used to measure winds on the Earth's surface to better predict phenomena such as El Nino.

*See **FY 2000 budget** on page 2*

Taylor reception postponed

The retirement reception honoring Bill Taylor, director of Marshall's Science and Engineering Directorate, has been postponed due to family illness. The event, originally planned for 4 p.m., Thursday, Feb. 4, will be rescheduled.

"Safety is a requirement"

*— Safety slogan submitted by **Richard Smith, HEI***

From NASA Administrator Dan Goldin

Achieve success through safety and health

NASA is the world's leader in aeronautics and space research, development and supporting operations. NASA is the leader because of you and your talent, dedication, and perhaps most importantly, spirit and desire to explore the unknown. Exploration involves risk, including the risk of failure. Without risk there can be little discovery, and exploration is one of NASA's principal missions. To maximize the likelihood of success in an increasingly complex and tightly coupled technological environment, we must become informed risk takers by identifying, understanding, and managing risk in all that we do. By following this approach, we will neither be surprised by, nor unprepared for, the few failures that may actually occur.

"NASA's ultimate success can only be achieved with the safety and health of its people."

— NASA Administrator Dan Goldin

Being an agency and workforce willing to accept risk, but only in an informed manner, is consistent with our unwillingness to compromise the safety and health of people and property or do harm to the environment. In fact, your safety and health, both on and off the job, is and always will be our concern. As we move into the 21st century, I have designated safety and health as our highest core value. Our record is exceptional, but we can do better by continuing to incorporate safety and health principles and practices into our daily decision making processes and lives.

As we embark on one of our great adventures — launching, constructing and utilizing the International Space Station, it is fitting that we remind ourselves that NASA's ultimate success can only be achieved with the safety and health of its people. We have begun a NASA Safety Initiative with the goal of making NASA the Nation's leader in the safety and occupational health of its workforce and the safety of the products and services we provide. I expect a firm resolve and commitment by everyone in the Agency to achieve this goal including zero tolerance for mishaps in the NASA workplace. Keep in mind that safety is everyone's responsibility and that it should never be regarded as the job of the Safety Office or someone else.

Accept your personal and organizational safety and health responsibilities and become involved in pursuing the elements of the NASA Safety Initiative. Together, we can achieve a safer and more productive work environment and continue to maintain our preeminence in air and space into the next century.

FY 2000 budget

Continued from page 1

The Center Director said the budget trend is on the increase for Advanced Space Transportation, and Microgravity Research and Space Product Development, two primary mission areas assigned to the Marshall Center. If the trend continues, spending for the first mission area could increase more than 75 percent over the next five years while spending for the second mission area could increase nearly 70 percent. Funding for space optics, a third primary mission area assigned to the Center, will probably remain level over the next few years, Stephenson said.

Overall anticipated economic impact to Alabama from the Marshall Center budget will be about the same in FY 2000 as it was in FY 1999, accounting for about $770 million and 9,500 jobs.

Stephenson said that he anticipates that NASA will offer employees another buyout incentive next year, which will help the Center move from a ceiling of 2,690 employees in FY 1999 to a ceiling of 2,525 employees in FY 2000.

Stephenson also said he was encouraged by the permission the Center has recently received to hire 60 new employees. "As a result of our recent buyout, which gave us more people leaving than we had anticipated, we are now able to hire people in a significant way for the first time since 1995. We are very excited about this… and expect to improve our skills base as a result of this opportunity."

Referring to the overall proposed NASA budget, Goldin said, "For the sixth year in a row, NASA's budget has declined while productivity improves." The NASA FY 1999 budget was $13.665 billion. The proposed NASA budget for FY 2000 ($13.578 billion) includes the following: International Space Station, $2.482 billion; launch vehicles and payload operations, $3.155 billion; science, aeronautics and technology, $5.424 billion; mission support, $2.494 billion; and Inspector General $20.8 million.

All-hands meeting

Continued from page 1

The newly created directorates and their functions are:

- **Space Transportation Directorate —** all space transportation programs and projects except Space Shuttle operations.
- **Science Directorate —** all microgravity, optics, space and Earth science programs and projects.
- **Flight Projects Directorate —** all Space Station and operations projects and functions, as well as future programs not related to the Space Transportation or Science directorates.
- **Engineering Directorate —** responsible for cross-cutting engineering disciplines supporting the program directorates.

Also new is the **Systems Management Office**, responsible for assessing systems requirements, overseeing program and project compliance to requirements and independent cost analysis.

The Observatory Projects Office is being renamed the Chandra X-ray Observatory Program, with future observatory technology development moved to the Science Directorate.

"This is a real improvement for the Marshall Center," said Stephenson. "This new streamlined organization builds upon the strength of our past and prepares us to meet the challenges of an exciting future."

Exploding gamma ray burst imaged for first time

Astronomers racing the clock managed to take the first ever optical images of one of the most powerful explosions in the Universe — a gamma ray burst — as it was exploding on Jan. 23. Gamma ray bursts produce more energy in a very short period than the entire Universe combined.

Because such bursts occur with no warning and typically last for just a few seconds, quick detection by orbiting spacecraft, and instant notification to astronomers, are critical in order to catch the bursts in the act.

The beginning of a bright gamma ray burst was quickly detected by BATSE — the Burst and Transient Source Experiment managed by the Marshall Center. The principal investigator for BATSE is Dr. Gerald Fishman at the Marshall Center. BATSE, onboard NASA's orbiting Compton Gamma Ray Observatory, continuously monitors the sky for gamma ray bursts.

While the burst was in progress, computers determined a rough location and sent the position to the Gamma-ray Burst Coordinates Network, based at Goddard Space Flight Center, Greenbelt, Md. The position was immediately forwarded via the network to astronomers at ground-based observatories throughout the world.

Just 22 seconds later, the Robotic Optical Transient Search Experiment in Los Alamos, N.M., operated by a team led by Dr. Carl Akerlof of the University of Michigan, was in position and took images of the patch of sky where the burst was reported. Their equipment is assembled from 35-mm camera lenses and parts culled from the amateur astronomy market. The first picture showed a brightening new star within the sky region of the patch of sky where the burst was reported.

Five seconds later, the burst achieved peak brightness, reaching 9th magnitude, about 16 times fainter than the human eye can see, but easily visible in an amateur telescope. Within eight minutes of the initial detection, the burst had faded by a factor of 100 below its maximum brightness. "I was amazed," Akerlof said. "At best, we expected something really dim optically, at the limit of our sensitivity. Instead we found a whopper."

"If this burst had originated in the Milky Way Galaxy, it would have lit up the night sky," said Dr. Alan Bunner, Director of NASA's Structure and Evolution of the Universe science theme at NASA Headquarters in Washington, D.C.

The event also was recorded by instruments aboard the Italian-Dutch BeppoSAX satellite, which obtained a much more accurate position for the burst within a few hours of its onset. It was this more precise location information that the Robotic Optical Transient Search Experiment team used to find the burst in their images.

> ***"These gamma ray bursts — the largest explosions known in the Universe — still seem to be able to surprise us."***
>
> ***— Dr. Gerald Fishman,***
> *BATSE principal investigator at the Marshall Center*

"This is the Holy Grail for the Gamma-ray Burst Coordinates Network," said Dr. Scott Barthelmy, an astronomer at Goddard who developed and runs the network. "Optical telescopes had seen the afterglow of a burst, but never the burst itself. This observation will help us understand the physical processes behind the bursting."

Within three hours of the burst, a team of astronomers led by Dr. Stephan Odewahn and Profs. Shri Kulkarni and George Djorgovski of the California Institution of Technology used the 60-inch Mt. Palomar telescope to find a fading optical counterpart to this gamma ray burst, helped by the precise localization provided by BeppoSAX.

The next night, a joint team, led by Dr. D. Kelson of the Carnegie Institution of Washington using the Keck II 10-meter telescope located at Mauna Kea, Hawaii, found that the distance to the burst is about nine billion light years, more than half way to the edge of the observable Universe.

Astronomers are not certain what produces gamma ray bursts, but possible causes include the mergers of two neutron stars, two black holes, or a neutron star and a black hole, or the explosion of a so-called hypernova. A hypernova is a theorized type of supernova or exploding star.

"The optical emission was about 10,000 times brighter than ever observed, something you could see with a pair of good binoculars," said Dr. Neil Gehrels, project scientist of the Compton Observatory. "Theorists will have a field day trying to explain this phenomenon."

Gehrels said the simultaneous observation of the burst in optical and gamma ray energies might open the door to a whole new generation of instruments like the Robotic Optical Transient Search Experiment, which is a fully automated telescope that can respond to information about transient celestial sources instantly. Orbiting telescopes detect several hundred gamma ray bursts each year.

The Robotic Optical Transient Search Experiment project is designed and operated by a collaboration of astrophysicists from the University of Michigan and the Department of Energy's Los Alamos and Lawrence Livermore National Laboratories. The National Science Foundation provided funding for observations at Keck II.

Animation of the Gamma-ray burst may be found at the following Web site:
http://www.msfc.nasa.gov/news

Additional information about the Burst and Transient Source Experiment may be found at the following Web sites:
http://www.batse.com
http://www.science.nasa.gov
http://www.batse.msfc.nasa.gov

Upcoming Events

Marshall Center to celebrate Black History Month

To commemorate Black History month in February, the Marshall Center Black History Committee has several events planned.

The theme "The Legacy of African American Leadership for the Present and the Future" will be highlighted during a Black History Month program at 9 a.m. Wednesday, Feb. 17 in Morris Auditorium.

Dr. Dorothy Huston, vice president of research and development at Alabama A&M University in Huntsville, will speak. The Alabama A&M University Choir, under the direction of Richard Tucker, also will perform.

A cultural arts exhibit will be displayed 9 a.m.-3 p.m. in the Bldg. 4200 lobby. Various impressions include works by Center employees, according to committee chairwoman Carolyn Landry.

Other Center events planned for the month-long celebration include:

- **"Down Home Blues" lunches**
  Feb. 5 —Bldg. 4203 cafeteria
  Feb. 12 —Bldg. 4610 cafeteria
  Soul food will be featured as a manager's lunch special. Marshall employees will provide musical entertainment from 11:30 a.m.-12:30 p.m.
- **Brown bag lunch seminar**
  Feb. 9, 11:30 a.m.-12:30 p.m.
  John Helmke of the U.S. Treasury Department will brief employees on savings bonds and present the new I series bond honoring Dr. Martin Luther King Jr.
- **Black history tour**
  Feb. 24, 10 a.m.-noon
  Employees are invited to tour the State Black Archives Research Center and Museum at Alabama A&M. Bus service will be provided and seating will be on a first-come, first served-basis. Contact Rita Evans-McCoy at 544-7507 by Feb. 19 for reservations.

'Marshall Stars' sought

"Marshall Stars" is a column featured in the Marshall Star to recognize Marshall Center employees and contractors who have made significant contributions to NASA and the Marshall Center by taking significant strides in leadership and dedication to their professional and/or educational development.

★ ★ ★
Marshall Stars
★ ★ ★

Employees and contractors may nominate themselves or another employee. Submit your nominations for consideration to Angela Storey, CO40, or call 544-0030.

Marshall Star to change publication day to Thursday beginning next issue

The publication and distribution day of the Marshall Star will change from Wednesday to Thursday beginning Feb. 11.

This change will provide extra time for gathering news from late Friday, weekend or Monday events — offering readers a fresher, more vital publication. Also, by distributing the Marshall Star on Thursdays, federal holidays will no longer significantly interfere with final editing and production.

The deadline for submitting contributions for consideration in the Marshall Star is noon Monday prior to the publication day. Submissions may be mailed to Marshall's Internal Relations and Communications Office, CO40, Bldg. 4200, room 101; faxed to 544-0007; or e-mailed to:
angela.storey@msfc.nasa.gov
ann.bryk@msfc.nasa.gov

For more information, readers may contact the Marshall Star Office at 544-0030.

Customer Support Center at Marshall helps motorist in dire straits

by Pamela Vaughn

Marshall's Customer Support Center recently provided late-night emergency aid to the driver of a car that hydroplaned off Interstate 565 into a ditch quickly filling with water.

Marshall employee Al Jordan, a friend of the driver, contacted Ruth Flack at the Customer Support Center for a weather report and the number for a 24-hour tow truck. With more rain in the forecast, the need for assistance was immediate. By transferring Jordan directly to the towing company, Flack saved critical time. Now car and driver are fine — a dangerous situation averted.

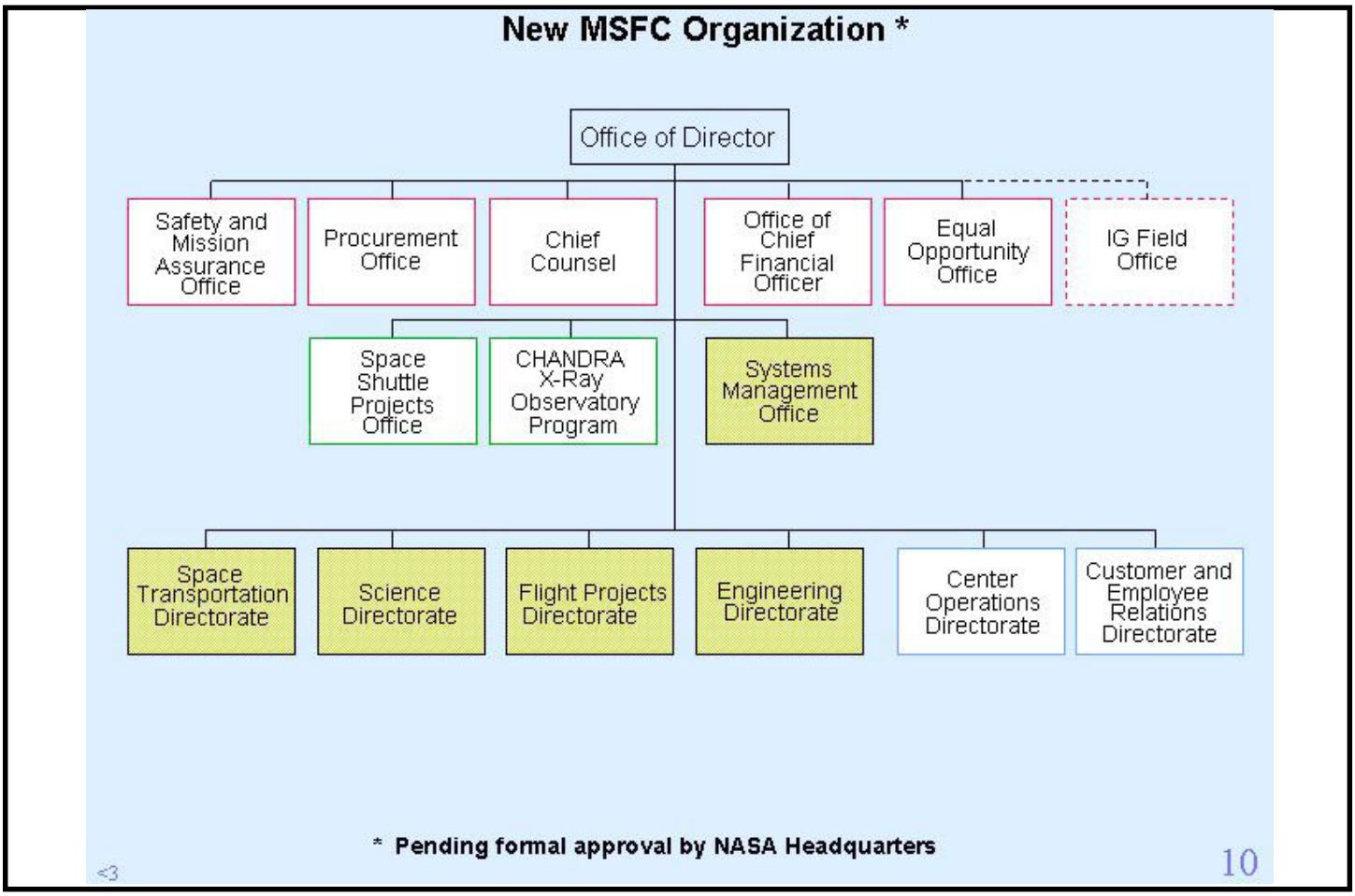
Although the request was not a normal one, the support Flack provided was invaluable.

The 24-hour Customer Support Center may be reached at 544–1771, or dial 544–HELP, connecting the caller with the Customer Help Line. A menu allows the customer to access security, taxi service, facility work requests, Center announcements, directory assistance or a NASA Information Support Center specialist. This is just one of the systems implemented by the Center Operations Directorate in an effort to support the One-Stop-Shop initiative.

The writer is a technical writer-editor for Scientific and Commercial Systems Corp.

Obituaries

Byers, James, 81, Taft, Tenn., died Dec. 30. Byers retired from Marshall in 1980 where he worked as a procurement analyst.
Smith, Joseph, 62, Peterman, Ala., died Dec. 13. Smith retired from Marshall in 1994 where he worked as an aerospace engineer with Flight Systems Safety.



The Marshall Center new organization chart above, is part of the "Restructuring for the Future" presentation by Center Director Art Stephenson. The presentation may be found on the Inside Marshall home page under Corner and Headlines at the following Web site: http://inside.msfc.nasa.gov/INSIDE/announcements/reorg.pdf

New organization

Continued from page 1

ment.

The restructuring philosophy I described in the all-hands meeting on Friday consisted of two key points:

1. Strong, focused, product line organizations are needed that more directly address our customers' needs

2. World-class engineering disciplines at Marshall need to be maintained to support the product line organizations

As we move to a new organization, we want to be careful to not lose the strength that brought us here. The reorganization is designed to maintain the strong cross-cutting engineering capability for which Marshall is recognized Agencywide. At the same time it will strengthen the product lines by moving resources that are largely dedicated to a product line into that product line organization.

We have defined three new product line directorates (Space Transportation, Science and Flight Projects), a new Engineering Directorate, and a new Systems Management Office. Teams are under way to assess the makeup and structure of each of these new organizations. The key requirement in these assessments is to look at each organization as a dedicated product-focused organization or a service organization. The service organizations (Engineering and Systems Management) should contain functions that are crosscutting (i.e., needed by more than one product line organization). If you have an opinion you wish to convey to a team, please feel free to contact one of the team members.

As I shared in the all-hands meeting Friday, reorganization is not an end in itself. I believe, however, that when we are finished with this reorganization, we will be working in a streamlined organization that better meets the needs of our internal and external customers. When we do that, because we want to make a positive difference, it will be more fun to come to work every morning.

My request of you is to look for the positive aspects of this new organization. Sure it involves change — and our human nature does not always embrace change. Replace the word "change" with "improvement." I believe this new organization offers significant improvements over the old organization.

We create the future by what we do each day. We can do it in an organization that makes that harder or easier. I prefer the latter.

Thank you for your support during this time of transition to the new organization. I am excited to be here as a member of the Marshall team. I look forward to an exciting future.

Employee Ads

Miscellaneous

★ Round oak table, 42", expandable with one leaf, four Windsor chairs, $250. 830-5285
★ Gulf Coast ceiling fan, oak blades, four-bulb lighting fixture, antiqued brass, beveled smoked glass, $50. 721-5609
★ Lavatories, two 18" porcelain, wall-hung w/ brackets, one with faucets, one without, $15/ $10. 534-2368
★ Shopping carts, $10 each. 837-0085
★ Jenny Lind crib, white, no mattress, $35. 828-5840
★ Simmons rifle scope, 3x9x40, with rim fire rings and clamps, $30. 534-8186
★ Fitness Flyer, $50; Health Rider, $50; rowing machine, $30; TOPIO trainer w/rubber bands, $30. 797-4623
★ Pfaltzgraff china, Heirloom, $200; AKC Rottweiler puppies, born Dec. 24, two males, $150 each, one female, $100. 931-425-0176
★ Glass-top table w/six chairs, Lloyd/Flanders, all-weather, wicker/wrought iron, tapestry fabric cushions, $1,385. 533-7796
★ Banjo, five-string, Kay, plastic and sheepskin heads, $75. 778-9149
★ Chainsaw, 18" Stihl, $250. 881-7000
★ Sega Saturn with several games, $120. 722-9989
★ Hay, bermuda or mixed grass, square bales, fertilized, $2.50 per bale. 778-8830
★ Ashley wood stove, free standing or insert, $150. 881-4229
★ Pentium class PC, 200 Mhz, speakers, 15" monitor, 400/800MB tape backup, video card, $500. 852-3272
★ TY beanie collection, 44 current and 71 retired, $1,300 o.b.o. 461-7154
★ Microwave oven, large, $50. 881-6688
★ Sega Genesis game system, two controllers, seven games, manuals, $45. 828-3887
★ Two tickets, Rod Stewart, 8 p.m. Feb. 14, Birmingham Jefferson Civic Center, $60 each. 880-0424
★ Aeromotion exerciser, $40. 882-9417
★ Factory utility trailer, 4'x8', $300. 837-6994
★ Baby stroller, Graco Brogham SL2 Premium, navy and white, $50. 828-9651
★ Pro-Form Spacesaver treadmill with upper body workout, 55" tread, pulse meter. 883-9361

Vehicles

★ 1985 Harley Davidson FXRT, touring package, belt drive, rubber mount, $8,500 o.b.o. 534-81861996
★ Pontiac Transport van, 7/8-passenger, power door locks, power windows, $10,500. 772-7842
★ 1970 Chevrolet Impala, 2-dr., needs work, $3,000 o.b.o. 837-9685
★ 1989 New Yorker for salvage, $750. (931) 433-0004
★ 1997 Ford Explorer XLT, 4-dr., V-8, $18,300. 880-6679
★ 1988 Acura Integra RS, $3,500 o.b.o. 534-7652
★ 1991 Mazda Protege LX, red, 4-dr., 5-spd., A/ C, Michelin tires, 34 miles per gallon, $2,850. 233-3773

Wanted

★ Grain mill. 837-0085
★ Backpacking, camping gear: framed packs, lightweight tents, etc. 233-4680

Lost

★ Gold cuff earring, Bldg. 4200/4201. 544-5236
★ Microwave, Samsung, model RE-552D, Bldg. 4201. 544-8092

Center Announcements

☛ ***SOMO briefing —*** A Space Operations Management Office (SOMO) briefing is 9-11 a.m., Wednesday, Feb. 3 at the Huntsville Operations Support Center at Marshall. The briefing will include information about the SOMO organization structure, services and the new Consolidated Space Operations Contract awarded to Lockheed-Martin. All Marshall Center projects and programs office personnel, and contractors providing services to the offices, are encouraged to attend. For more information, **contact** David Mann at 544-2070.

☛ ***Volunteers sought —*** The Equal Opportunity Office at Marshall is seeking volunteers to chair and/or serve on the 1999 Take Our Children to Work committee. Interested employees should call Alicia Beam at 544-2849 or e-mail to: alicia.beam@msfc.nasa.gov

☛ ***Toastmasters —*** The NASA Lunar Nooners Toastmasters Club will meet at 11:30 a.m., Tuesday, Feb. 9 in the Bldg. 4610 cafeteria conference room. All Marshall Center employees, contractors and friends are invited. **Contact:** Lee Johns, 544-5241

☛ ***Emergency Warning System Test —*** The monthly test of the Emergency Warning System at Marshall is scheduled for 3 p.m. Thursday. This is an audio test only, and employees should not evacuate to protective areas. If severe weather is occurring at this time, the test will be rescheduled to a later date. Safety coordinators and monitors should send reports of malfunctioning speakers to: AB11/Emergency Preparedness Officer at 544-5187 immediately after the test.

☛ ***Valentine Dinner Dance —*** Tickets for the Valentine Dinner Dance are on sale and available from MARS Ballroom Dance Club members. The semi-formal event, to be held Saturday, Feb. 13 at the Von Braun Center, will begin with a social at 6:30 p.m., a buffet dinner at 7 p.m., followed by dancing from 8-11:30 p.m. Ticket cost is $18 per person with a $3 discount for MARS Ballroom Dance Club members. **Contact:** Tamara Landers, 544-6818; Pat Sage, 544-5427; Ed Ogozalek, 837-1486; Linda Kinney, 544-0563; or Bob Williams, 544-3998. Reservations for a table of eight may be made by calling Woody Bombara at 650-0200.

☛ ***Blue Cross/Blue Shield —*** A Blue Cross/ Blue Shield federal representative will be at the Marshall Center 9-11 a.m., Wednesday, Feb. 10 in Bldg. 4200, room 324. Employees with questions or claim concerns are encouraged to attend.

☛ ***Conference —*** The 4th annual Technical Conference of the Association for Configuration and Data Management will be held March 29-April 1 at the Renaissance Waverly Hotel in Atlanta, Ga. The conference theme is "The new Paradigm — Thinking Out of the Box." Complete details of the conference may be found at the following Web site: http://www.acdm.org
For more information, **contact** Brenda Sutherland at 544-6552; or Brenda Kyle at 955-1589.

☛ ***Vacation travel —*** Executive Tour & Travel Service Inc., through the NASA Exchange at Marshall, is offering a Disney/Epcot area hotel package of 4 days/3 nights for $139 for two adults and two children up to 12 years of age. A deposit of $70 is required by Feb. 26, however, travel dates are good through February 2000. Flyers are available at the Marshall Activities Bldg. 4752. For more information, **contact** Executive Tour & Travel at 1-800-272-4707. The NASA Exchange account reference is ER11583-005 and is available to Marshall employees, retirees and on-site contractors.

Job Opportunities

CPP 99-15-JB, Contract Specialist, GS-1102-14 (Multiple Positions), Procurement Office. Closes Feb. 5.
CPP 99-19-JB, General Supply Specialist (Lead), GS-2001-13, Center Operations Directorate, Logistics Services Office, Property Management Division. Closes Feb. 5.
CPP 99-21-JB, Communications Specialist, GS-301-14, Customer & Employee Relations Directorate, Internal Relations & Communications Office. Closes Feb. 9.

MARSHALL STAR

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